

IN THE UNITED STATES DISTRICT COURT FOR THE  
SOUTHERN DISTRICT OF IOWA  
DAVENPORT DIVISION

---

AMERICAN HUNTING INNOVATIONS,  
L.L.C. a/k/a RDT ARCHERY & a/k/a  
KEMPF CROSSBOWS; J & S R.D.T.  
ARCHERY, INC.; and JAMES J. KEMPF,  
an individual,

Plaintiffs,

v.

SAVAGE SPORTS CORPORATION;  
EXTREME TECHNOLOGIES, INC.; and  
EXTREME TECHNOLOGIES, INC. d/b/a  
BOWTECH,

Defendants.

---

Case No. 3:12-cv-00096-HDV-RAW

**DEFENDANTS' OPENING CLAIM  
CONSTRUCTION BRIEF**

**TABLE OF CONTENTS**

<b>I.</b>	<b>INTRODUCTION AND SUMMARY .....</b>	<b>1</b>
<b>II.</b>	<b>LEGAL STANDARDS .....</b>	<b>4</b>
<b>III.</b>	<b>CONSTRUCTION OF THE DISPUTED TERMS.....</b>	<b>6</b>
<b>A.</b>	<b>“A first/second string guide” .....</b>	<b>7</b>
<b>B.</b>	<b>“A first string coupled to said first string guide and to said second string guide” .....</b>	<b>12</b>
<b>C.</b>	<b>“A nock point [provided on said second string]” .....</b>	<b>15</b>
<b>IV.</b>	<b>CONCLUSION.....</b>	<b>19</b>

# **TABLE OF AUTHORITIES**

	Page(s)
<b>CASES</b>	
<i>Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.</i> , 359 F.3d 1367 (Fed. Cir. 2004).....	14
<i>Becton, Dickinson &amp; Co. v. Tyco Healthcare Group, LP</i> , 616 F.3d 1249 (Fed. Cir. 1998).....	4, 5, 13, 14
<i>Bicon, Inc. v. Straumann Co.</i> , 441 F.3d 945 (Fed. Cir. 2006).....	5, 6, 14
<i>C.R. Bard, Inc. v. U.S. Surgical Corp.</i> , 388 F.3d 858 (Fed. Cir. 2004).....	6
<i>Cat Tech LLC v. TubeMaster, Inc.</i> , 528 F.3d 871 (Fed. Cir. 2008).....	14
<i>Elekta Instrument S.A. v. O.U.R. Scientific Int’l, Inc.</i> , 214 F.3d 1302 (Fed. Cir. 2000).....	14
<i>Engel Indus., Inc. v. Lockformer Co.</i> , 96 F.3d 1398 (Fed. Cir. 1996).....	5
<i>Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.</i> , 93 F.3d 1575 (Fed. Cir. 1996).....	14
<i>Gaus v. Conair Corp.</i> , 363 F.3d 1284 (Fed. Cir. 2004).....	5, 13
<i>Innova/Pure Water, Inc. v. Safari Water Filtration Sys.</i> , 381 F.3d 1111 (Fed. Cir. 2004).....	4
<i>Markman v. Westview Instruments, Inc.</i> , 52 F.3d 967 (Fed. Cir. 1995), <i>aff’d</i> 517 U.S. 370, 384 (1996).....	4
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005).....	passim
<i>Renishaw PLC v. Marposs Societa’ per Azioni</i> 158 F.3d 1243 (Fed. Cir. 1998).....	4
<i>Vitronics Corp. v. Conceptronic</i> , 90 F.3d 1303 (Fed. Cir. 2005).....	4

**OTHER AUTHORITIES**

Merriam-Webster.com,

<http://www.merriam-webster.com/dictionary/provide> (last visited May 17, 2013) ..... 16

Defendants Savage Sports Corporation, Extreme Technologies, Inc., and Extreme Technologies, Inc. d/b/a Bowtech (collectively “Bowtech”) submit the following opening claim construction brief in support of their proposed claim constructions. Bowtech’s claim constructions rely on the plain meaning of the claim language and the context of the claim language read in light of other claims and the specification. This so-called “intrinsic evidence” is what controlling Federal Circuit law dictates is the paramount tool for claim construction purposes, rather than “extrinsic evidence” that might support a definition different from that required by the intrinsic evidence.

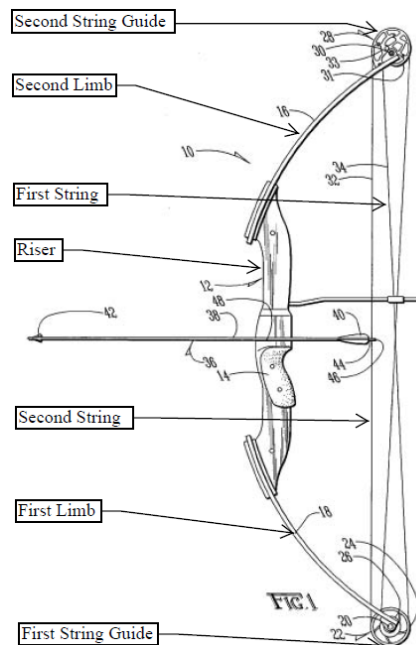
## **I. INTRODUCTION AND SUMMARY**

Bowtech was founded by John Strasheim and Dewayne Tiller in 1999. Bowtech’s first bow was introduced at the 2000 Archery Trade Association show, where Bowtech challenged the competition to compare their bow performance to Bowtech’s in a chronographed speed test. None of the competitive bows outperformed the new bow. Since that auspicious start the company has grown into one of the most successful bow companies in the U.S. and the world. Bowtech now offers a full range of bow hunting products, including single and dual cam bows and cross bows, and a wide range of bow hunting accessories. Bowtech is a leader in advancing archery technology, owning many patents and pending patent applications.

At issue in this litigation is U.S. Patent 7,708,001 (“the ‘001 Patent”), owned by Plaintiff American Hunting Innovations, LLC a/k/a RDT Archery & a/k/a Kempf Crossbows, J & S & S R.D.T. Archery, Inc., and James J. Kempf (collectively “American”). The ‘001 Patent issued from the U.S. Patent and Trademark Office (“PTO”) on May 4,

2010<sup>1</sup>. The '001 Patent is directed to a manner of configuring single and double cam archery bows and crossbows.

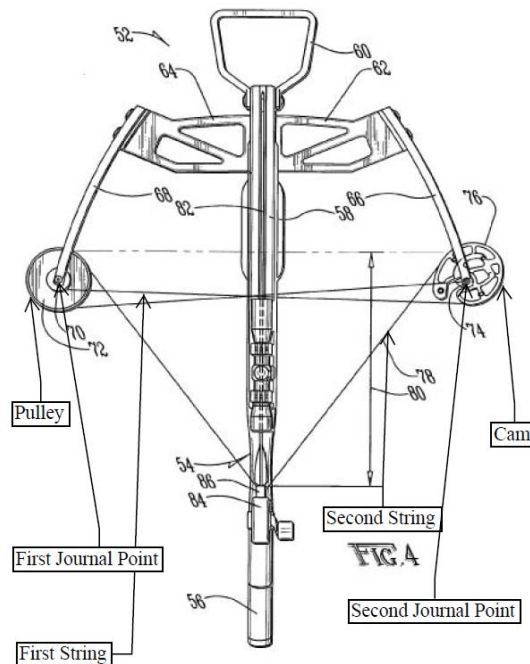
As explained in the patent specification and as depicted in Figure 1 below, which depicts a single cam bow, a “first limb” 18 and a “second limb” 16 are coupled to the grip portion of the bow 10, called a “riser” 12. See 2:10-14.<sup>2</sup> A “first string guide” in the form of a cam or pulley (here a pulley 22) is rotatably mounted or “journalled” to the first limb, and a “second string guide” in the form of a cam 28 is journalled to the second limb. A “first string”, here one of the so-called “cables” 34, is attached to and extends between the first and second string guides. A “second string”, here the “bowstring” 32, is attached to and extends between the first and second string guides. 2:14-37. While not explained in the patent, cables have for many years been included in these bows to help provide balance as the bowstring is drawn back and released.



<sup>1</sup> See Exh. A (“the ‘001 Patent”).

<sup>2</sup> Citations to the ‘001 Patent are made in the following format: Column:line. For example, this citation refers to Column 2, line 10 through line 14 of the ‘001 Patent. Citations at the end of a paragraph provide support for the entire paragraph.

The patent discloses a similar way to configure a crossbow. Figure 4 depicts a crossbow 52 that includes a pulley 72 and a cam 76, which in the detailed description are not called string guides. The crossbow is rigged similar to the bow 10 of Figures 1-3 in that one first string or cable extends between the inner track of pulley 72 and the outer track of cam 76. The crossbow embodiment is, however, different in that another of the first strings or cables extends from the outer track of pulley 72 but terminates at the second journal point 74.



The construction of the following phrases found in claims 3, 6, 10 and 12 are now before the Court:

Term	Plaintiffs' Proposed Construction	Defendants' Proposed Construction
"A first string guide and a second string guide"	Everything on the first/second limb that guides a string	A first/second string cam or pulley for guiding a string as it is taken up or let out when an arrow is drawn back for shooting and released
"A first string coupled to said first string guide and to said second string guide"	Plain and ordinary meaning / no proposed construction provided	A first string is received by the first and second string guides such that the first string is taken up or let out by the string guides as the bow is drawn back for shooting and released

“Nock point”	The specific point where the nock of an arrow/bolt is to be nocked on the string	A component positioned on the bowstring to receive and position the rear tip of the arrow
--------------	--	---

## II. LEGAL STANDARDS

Claim construction is a question of law to be decided by the district court at the Markman hearing.<sup>3</sup> To construe claim language, the Federal Circuit has directed district courts to rely predominantly on the intrinsic record, including the claim language, the specification, and the prosecution history.<sup>4</sup> In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term.<sup>5</sup> In such circumstances, it is improper to rely on extrinsic evidence.”<sup>6</sup> In considering the intrinsic evidence, the Federal Circuit requires the court to look first to the words of the claims to define the scope of the invention.<sup>7</sup> Claim construction “begins and ends in all cases with the actual words of the claim.”<sup>8</sup> “It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’”<sup>9</sup>

Generally, claim terms are construed according to their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention.<sup>10</sup> As

<sup>3</sup>E.g., *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 at 979 (Fed. Cir. 1995), *aff’d* 517 U.S. 370, 384 (1996).

<sup>4</sup>E.g., *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-17 (Fed. Cir. 2005).

<sup>5</sup>*Vitronics Corp. v. Conceptronic*, 90 F.3d 1576, 1583 (Fed. Cir. 1996).

<sup>6</sup>*Id.*

<sup>7</sup>*Phillips*, 415 F.3d at 1312.

<sup>8</sup>See e.g., *Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998)).

<sup>9</sup>*Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)).

<sup>10</sup>*Id.* at 1312.



the meaning of a claim term may not be readily apparent, courts should look not only to the context of the surrounding words of the claim, but also to differences among claims, both asserted and unasserted.<sup>11</sup>

In construing the terms of a claim, “[w]here a claim lists elements separately, ‘the clear implication of the claim language’ is that those elements are ‘distinct component[s]’ of the patented invention.”<sup>12</sup> That is, “[c]laims must be ‘interpreted with an eye toward giving effect to all terms in the claim.’”<sup>13</sup> So unless unusual circumstances exist, different claim terms cannot refer to the same component in the accused design.<sup>14</sup>

The Federal Circuit’s *en banc* decision in *Phillips v. AWH* also reinforced the importance of the specification, as it is “always highly relevant to the claim construction analysis.”<sup>15</sup> Nevertheless, *Phillips* reiterated the danger of reading limitations from the specification into the claim in the absence of clear evidence that the patentee intended to limit the claim scope.<sup>16</sup>

Extrinsic evidence, such as materials found on the Internet, may also be pertinent in the construction of the claims. However, “while extrinsic evidence ‘can shed useful light on the relevant art’ . . . it is ‘less significant than the intrinsic record in determining the legally

---

<sup>11</sup> *Id.* at 1314.

<sup>12</sup> *Becton, Dickinson & Co.*, 616 F.3d at 1254 (citing *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004)) (finding that where a claim separately recites a “hinged arm” and a “spring means connected to the hinged arm,” these two elements cannot be one and the same).

<sup>13</sup> *Id.* at 1257 (citing *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006)).

<sup>14</sup> See e.g., *Engel Indus., Inc. v. Lockformer Co.*, 96 F.3d 1398, 1404-05 (Fed. Cir. 1996) (concluding that where a claim provides for two separate elements, a “second portion” and a “return portion,” these two elements “logically cannot be one and the same”).

<sup>15</sup> *Phillips*, 415 F.3d at 1315.

<sup>16</sup> *Id.* at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”).

operative meaning of claim language.’”<sup>17</sup> One reason courts give less credence to extrinsic evidence is that it is difficult for someone attempting to design around a patent to determine the meaning of the claim language if materials that are not part of the PTO record are considered in interpreting the claims. It is important that claims provide the “notice” function so that third parties can determine the meaning of the claim.<sup>18</sup> “In sum, extrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.”<sup>19</sup>

### III. CONSTRUCTION OF THE DISPUTED TERMS

Claims 3, 4, 6-8, 10 and 12 of the ‘001 Patent are at issue in this case. Claims 3, 6, 10 and 12 are independent claims, while the remaining asserted claims depend from those independent claims. Claim 3 is set forth below as an example.

A shooting bow and arrow system comprising:

- (a) a bow comprising:
  - i. a riser;
  - ii. a first limb extending from said riser in a direction away from a direction of shooting; and
  - iii. a second limb extending from said riser in a direction away from a direction of shooting;
- (b) a first string guide;
- (c) means for journaling said first string guide to said first limb;
- (d) a second string guide;
- (e) means for journaling said second string guide to said second limb;
- (f) a first string coupled to said first string guide and to said second string guide;

<sup>17</sup> *Id.* at 1317 (Fed. Cir. 2005) (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)).

<sup>18</sup> *E.g., Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950-51 (Fed. Cir. 2006) (“The purpose of a patent claim is to define the precise scope of a claimed invention, thereby giving notice both to the examiner at the U.S. Patent and Trademark Office during prosecution, and to the public at large, including potential competitors, after the patent has issued.”)

<sup>19</sup> *Phillips*, 415 F.3d at 1319.

- (g) a second string coupled from a first point on said first string guide forward of said first journaling means to a second point on said second string guide forward of said second journaling means;
- (h) an arrow extending from said second string to said riser, and
- (i) wherein said arrow is coupled to said second string at a point rearward of said first string guide and said second string guide.

**A. “A first/second string guide”**

<b>Plaintiffs’ Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Everything on the first/second limb that guides a string	A first/second string cam or pulley for guiding a string as it is taken up or let out when an arrow is drawn back for shooting and released

Claims 1-13 of the ‘001 Patent use the terms “first string guide” and “second string guide” throughout. Claim 3 will be analyzed here, as similar language is found in each of the asserted independent claims. Paragraphs (b)-(e) of claim 3 are the first references to the string guides:

- (b) a first string guide;
- (c) means for journaling said first string guide to said first limb;
- (d) a second string guide;
- (e) means for journaling said second string guide to said second limb

Paragraphs (c) and (e) inform us that the string guides are set up to rotate on the first and second limbs, since “means for journaling” provides the rotatability function. Claim 3 continues:

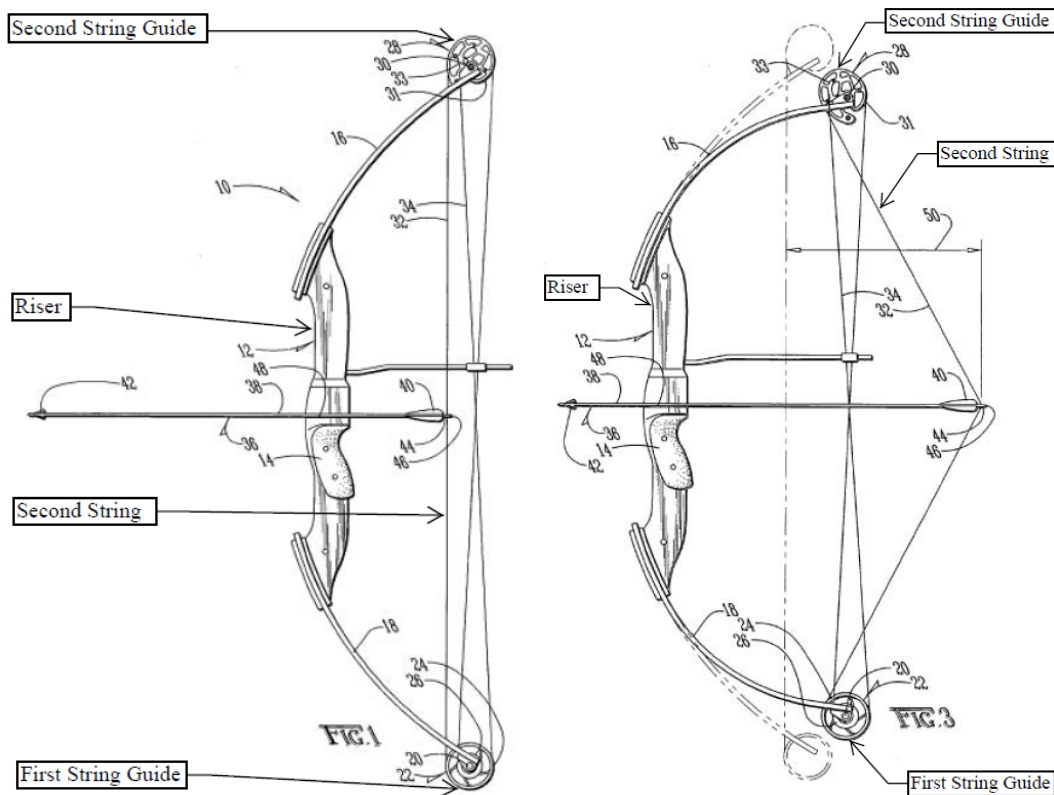
- (f) a first string coupled to said first string guide and to said second string guide;
- (g) a second string coupled from a first point on said first string guide forward of said first string journaling means to a second point on said second string guide forward of said second journaling means;

Clauses (f) and (g) provide that first and second strings are coupled to the string guides.

Claim 3 concludes:

- (h) an arrow extending from said second string to said riser, and
- (i) wherein said arrow is coupled to said second string at a point rearward of said first string guide and said second string guide.

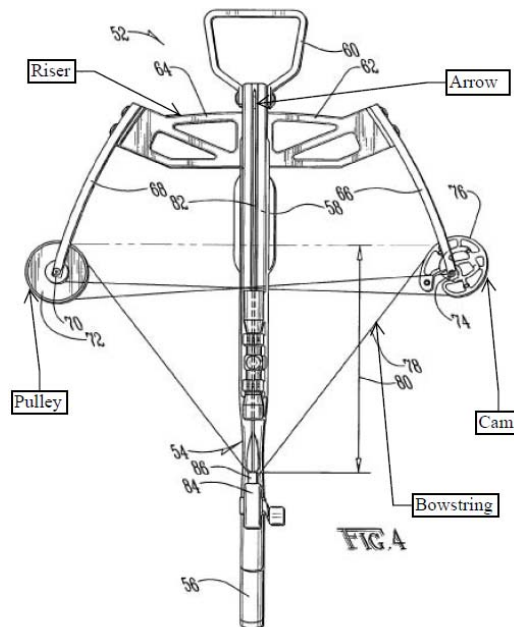
Clauses (h) and (i) note that when an arrow is mounted to the second string, the arrow is pulled back to its ready-to-shoot condition. This can be seen by comparing Figures 1 and 3 below.



In Figure 1, the arrow extends from the second string or bowstring 32 to the riser but the arrow is coupled to the second string at a point forward of the first string guide 22 and the second string guide 28. Comparing Figure 3, it can be seen that the arrow extends from the second string 32 to the riser and, as recited in claim 3, the arrow is coupled to the second string at a point rearward of the first string guide 22 and the second string guide 28. This

shows that claim 3 is referring to the arrow having been pulled back from the position in Figure 1 to the position in Figure 3, causing the first and second string guides 22 and 28 to rotate. This would be expected since they are mounted to the limbs by “means for journaling” which facilitate the rotation and the letting out of the string as the arrow is drawn back.

The crossbow of Figure 4 is similar in that it shows the bowstring 78 drawn back such that the arrow extends from the bowstring to the riser, with the arrow coupled to the bowstring at a point rearward of the pulley 72 and cam 76. This again demonstrates that the system recited in claim 3 anticipates the first and second string guides (although in the detailed description string guides are not mentioned – only pulley and cam) rotating and letting out string as the arrow that is coupled to the bowstring is drawn back to its shooting position.



The remaining claims treat the first and second string guides in a similar fashion except that claims 10 and 12 require that the first string guide be a cam, and claim 12 requires that the second string guide be a cam as well.

As discussed above, the Federal Circuit tells us that after considering the claim language, reference should be made to the patent specification.<sup>20</sup> The Detailed Description of the Preferred Embodiment states the following:

A pulley is journaled to the first limb (16) (sic - should be 18) with an axle (20) which acts as journal point. . . . As shown in FIG. 1, a second string guide, which in the preferred embodiment is a cam (28), is journaled to the second limb (18) (sic - should be 16) at a second journal point (30). . . . The cam (28) is preferably constructed as shown in FIG. 2, having an outer track (31) and an inner track (33), but may be constructed in any manner known in the art. If desired, an additional cam (not shown) synchronized with the cam (28) may be used in place of the pulley (22).

2:13-29.

As mentioned above, the Detailed Description of the crossbow does not even use the term “string guide.” Instead the terms “cam” and “pulley” are used. For example, the description of the crossbow states: “Journaled to the first limb (66) at a first journal point (70) is a pulley (72). Journaled to the second limb (68) at a second journal point (74) is a cam (76).” 3:7-9.

It can be seen that throughout the specification the term “string guide” is used to refer to a cam or a pulley, and to nothing else. As described above, both the claims and the drawings support the interpretation that the string guides are rotating as the arrow is drawn back to the shooting position, letting out string as necessary, and then of course taking up the string as the arrow is released.

Bowtech’s expert witness Jason Fogg states in his report that the term “string guide” does not have special meaning in the bow art or is ever used in the field.<sup>21</sup> He notes in his report that, based on the detailed description and the figures, a person of ordinary skill in the

---

<sup>20</sup> See *Phillips*, 415 F.3d at 1315-17.

<sup>21</sup> See Exh. B (Expert Report of Jason Fogg) at 6.

art at the time of the invention would understand that, in operation, the string guides, in the form of cams or pulleys, are taking up or letting out string as the arrow is drawn back and released.<sup>22</sup> Mr. Fogg's report continues:

I have also tried to interpret the claim language based on the figures provided. My proposed construction of the term "string guide" is substantiated by the embodiments shown in Figures 1-4. For example, Fig. 1 shows a first string extending from an outer track of the top cam that is journaled to the top limb and spanning to an inner track of the bottom pulley that is journaled to the bottom limb. The second string (or bowstring) extends from the outside track of the top cam, around the outer track of the bottom pulley, and then returns to an inner track of the top cam. This is consistent with the interpretation of a "string guide" being a cam or pulley that takes up or lets out string during operation of the bow.<sup>23</sup>

American contends that the term "string guide" means everything on the first or second limb that guides a string. However, their expert report in support of this construction offers absolutely no intrinsic evidence in support. Mr. Sturm's initial and rebuttal reports include hand sketches of grooves in cams and pulleys but do not reference anything from the patent specification, claims or drawings in support, other than referring to a few statements from the specification that the depicted arrangement is only a "preferred embodiment." If Mr. Sturm's "grooves" were so significant, one would think that they would have been mentioned in the claims, the specification or the prosecution history, or would have been shown in the drawings. In contrast, Bowtech's construction refers to the claims, specification and drawings to show what is meant by the terms first and second string guides, to provide guidance for the Court and, once the Court rules on claim construction, for the jury.

It is also interesting, and Bowtech submits significant, that in the Detailed Description of the patented crossbow, which is what is at issue in this case, reference is never

---

<sup>22</sup> *Id.* at 6-7.

<sup>23</sup> *Id.* at 7.

made to the first and second string guides; instead, they are simply referred to as the cam and pulley. *See* 2:57-3:28. This shows what was important in the minds of the inventor and his patent attorney, and what was eventually accepted by the PTO in granting the patent.

**B. “A first string coupled to said first string guide and to said second string guide”**

<b>Plaintiffs’ Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning / no proposed construction provided	A first string is received by the first and second string guides such that the first string is taken up or let out by the string guides as the bow is drawn back for shooting and released

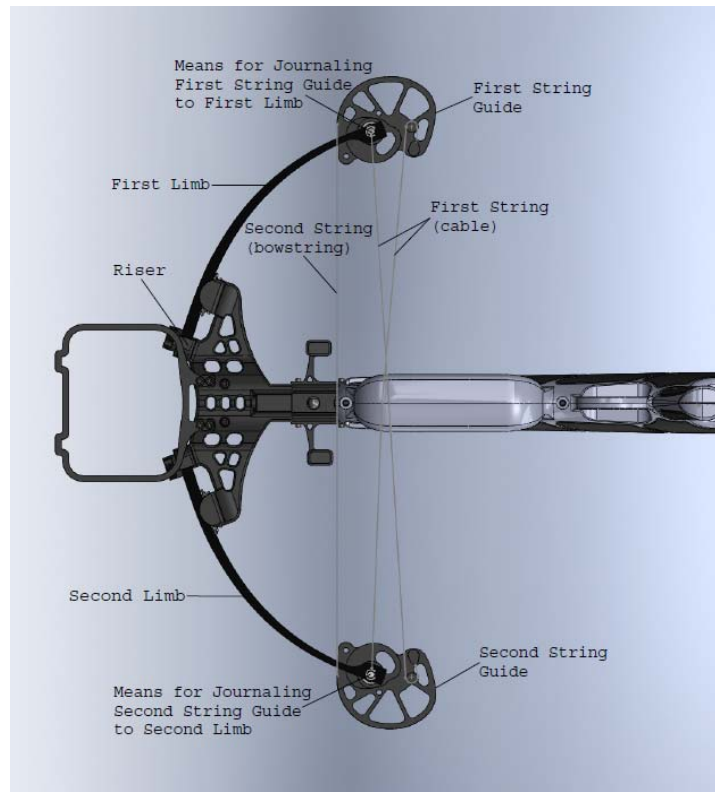
Paragraph (f) of claim 3 and of the other asserted independent claims states: “(f) a first string coupled to said first string guide and to said second string guide.” American feels the language is clear. Bowtech agrees, but the parties disagree on what the “clear” language means.

Perhaps the best starting point is to discuss what the claim does not say. It does not say “a first string coupled to said first string guide and to *said means for journaling said second string guide to said second limb.*” This is a critical difference when reference is made to the Bowtech Stryker crossbow that is accused of infringing the ‘001 Patent. While the Markman hearing is not a time to decide infringement, the Court may appreciate understanding the relevance of this issue.

Depicted below is the accused Stryker crossbow. As claim 3 describes, the Stryker crossbow includes a riser, first and second limbs, and first and second string guides. It also includes means for journaling the first and second string guides to the first and second limb, respectively. However, the first string is not “coupled to said first string guide and to said second string guide.” Instead, one of the Stryker first strings (there actually are two first strings, shown below) is mounted between the first string guide and the means for journaling



the second string guide to the second limb; that is, the axle.



Thus, while the Court is not to decide the issue of infringement at the Markman stage, it may be helpful to see the motivation behind American’s proposed construction. They are attempting to read the first or second string guide to include the first or second journaling means.

Federal Circuit case law does not permit such a construction. As mentioned above, in construing the terms of a claim, “[w]here a claim lists elements separately, ‘the clear implication of the claim language’ is that those elements are ‘distinct component[s]’ of the patented invention.”<sup>24</sup> That is, “[c]laims must be ‘interpreted with an eye toward giving

<sup>24</sup> *Becton, Dickinson & Co.*, 616 F.3d at 1254 (citing *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004)) (finding that where a claim separately recites a “hinged arm” and a “spring means connected to the hinged arm,” these two elements cannot be one and the same).

effect to all terms in the claim.”<sup>25</sup> In the present context, this means that the element “second string guide,” as used in paragraphs (d) and (f), cannot be construed to include the element “means for journaling the second string guide to the second limb” because the “means for journaling” is separately recited in paragraph (e):

- (d) a second string guide;
- (e) means for journaling said second string guide to said second limb;
- (f) a first string coupled to said first string guide and to said second string guide

Indeed, where two terms are in close proximity to one another in the same claim, there is an inference that a different meaning should be assigned to each.<sup>26</sup> After all, if the inventor intended the two terms to describe the same element, “one would expect the claim to consistently refer to this element [with one or the other of the two terms], but not both, especially within the same clause.”<sup>27</sup> Accordingly, the “second string guide” and its corresponding “means for journaling” are distinct components of the claimed invention. To find otherwise (i.e., construe the elements as the same) would render the asserted claims “nonsensical.”<sup>28</sup>

Now that we know what paragraph (f) cannot mean, reference will now be made to the claim language and the specification to see what it does mean. The language “a first string coupled to said first string guide and to said second string guide” seems clear. The

<sup>25</sup> *Id.* at 1257 (citing *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006)).

<sup>26</sup> *Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004) (“[T]he use of [two] terms in close proximity in the same claim gives rise to an inference that a different meaning should be assigned to each.”).

<sup>27</sup> *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1579 (Fed. Cir. 1996).

<sup>28</sup> *Becton, Dickinson & Co.*, 616 F.3d at 1255 (“A claim construction that renders asserted claims facially nonsensical ‘cannot be correct.’”); *see also Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 885 (Fed. Cir. 2008) (refusing to adopt a claim construction which would render a claim limitation “meaningless”); *Elektro Instrument S.A. v. O.U.R. Scientific Int'l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000) (refusing to adopt a claim construction which

term “coupled” is used elsewhere in claim 3, making reference in paragraph (g) to “a second string coupled from a first point on said first string guide . . . to a second point on said second string guide.” This use is therefore the same as the use in paragraph (f) and is referring to the strings extending across and being mounted to a string guide so that the string guides can let out and take up string as the arrow is drawn back and released.

Turning now to the specification, the Detailed Description of the crossbow also supports the interpretation that “coupled”, in the context of the claim language of paragraph (f) ” should be construed as meaning “being received by string guides such that a string is taken up or let out by the string guides as the bow is drawn back for shooting and released.”

In referring to Figure 4, the specification states:

As described above, the crossbow (52) is provided with a bowstring (78) coupled to the pulley (72) at a position located between the first journaled point (70) and the riser (62). Similarly, the bowstring (78) is coupled to the cam (76) at a position located between the second journal point (74) and the riser (64). By locating the bowstring (78) forward and inward of the (sic) both the pulley (72) and cam (76), the powerstroke (80) of the crossbow (52) is increased, which increases the speed of a bolt (82) launched by the crossbow (52), and decreasing the draw weight associated with cocking the crossbow (52).

3:9-20. This Detailed Description shows that the cams work to provide that powerstroke as they rotate to let out string as the bowstring is being cocked or pulled back and as the bolt (which drives the arrow) is launched.

**C. “A nock point [provided on said second string]”**

<b>Plaintiffs’ Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
The specific point where the nock of an arrow/bolt is to be nocked on the string	A component positioned on the bowstring to receive and position the rear tip of the arrow

Claim 10 references a “nock point” in the phrase (j): “a nock point provided on said

---

would render claim language superfluous).

second string.”<sup>29</sup> As framed above by the parties proposed constructions, the issue is whether the nock point is simply a point on the bowstring or whether it is a component positioned on the bowstring to receive the rear tip of the arrow.

Making reference first to the claims as mandated by the Federal Circuit, paragraph (j) is enlightening. It says “a nock point *provided on* said second string.” The ordinary language “provided” suggests that something is on the string rather than referring simply to a place on the string. Indeed, the dictionary definition of the word “provide” is “to supply or make something available.”<sup>30</sup>

Looking elsewhere in claim 10, paragraphs (g) and (h) also refer to a “point”:

- (g) a second string coupled from a first point on said first string guide to a second point on said second string guide;
- (h) wherein said first point is located between said riser and said first string guide journaling means.

Thus, if the drafting attorney and the PTO examiner had intended that the “nock” was actually a “point” on the string and used that word elsewhere in the claim, they would have used that word here to say that the nock point was actually a point located on the string instead of using the language “provided on the second string.”

The Detailed Description provides further support for Bowtech’s construction. No reference is made to the nock point in the description of the crossbow, but in describing the bow of Figures 1-3, the following statement is included: “When it is desired to utilize the bow (10) of the present invention, an arrow (36) having a shaft (38), flights (40), a head (42) and a nock (44) is provided.” 2:41-43. This tells us that the nock 44 is the tail end of the arrow that mounts to the bowstring 32. The Detailed Description continues: “The nock (44)

---

<sup>29</sup> “Nock point” is not used in the other asserted claims. It is used in other non-asserted claims but the language is precisely the same as in claim 10.

<sup>30</sup> Merriam-Webster.com, <http://www.merriam-webster.com/dictionary/provide> (last visited

is coupled to a nock point (46) provided in the bowstring (32).” 2:43-44. The fact that the nock is coupled to a nock point provided in the bowstring supports Bowtech’s position that the nock point is an actual component on the bowstring and not just a position on the bowstring.

As explained by Bowtech’s expert Jason Fogg:

It is common practice to use a nock point on the bowstring of a traditional bow. This is necessary because the grip of the bow is located below the arrow. This location causes an upward force on the nock of the arrow up the string when the string is drawn by an archer. The nock point prevents the nock of the arrow from slipping up the string. Nock points are typically made from brass and crimped onto the string, but are also made from many other types of material including loops of string and tied knots. Crossbows, however, do not normally employ a nock point. This is due to the fact that the arrow attaches to the center of the bow string, eliminating the upward forces which exist on a regular bow.<sup>31</sup>

This is undoubtedly why no reference is made to a nock point in the detailed description of the crossbow.

American’s expert Sturm refers to extrinsic evidence in the form of Internet searches to determine the meaning of nock point. However, as discussed earlier, the intrinsic evidence and particularly the claims are far more important than extrinsic evidence that a party might uncover in support of its position.<sup>32</sup> Mr. Sturm also references the Hoyt 2002 Compound Owner’s Manual, and notes that Mr. Fogg is employed at Hoyt. Mr. Fogg addresses this discussion in his rebuttal report:

[Mr. Sturm] states that [the Hoyt manual] uses the terms “nocking point” and “nock locator” in a manner supporting his position that a nock point is a location on a string rather than something added

---

May 17, 2013).

<sup>31</sup> See Exh. B (Expert Report of Jason Fogg) at 9.

<sup>32</sup> See e.g., *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005).

to the string. The exact quote from the manual is: “A nock point is a reference on the string that marks the exact location for you to nock your arrow.” I would interpret this to mean the exact opposite. It states that the nock point is a “reference” that “marks” a location on the string. This would imply that it is something more than just a location. Further clarification of this usage is provided in the Hoyt 2012 Compound Owner’s Manual. On page 8 it states, “Your setup and style of shooting (arrow type, fingers or release aid, arrow rest, etc.) will determine the type and location of the nocking point. Hoyt does not recommend the use of brass or other metal clamp on nocking point devices.” Clearly, Hoyt is using the term nocking point as something added to the string. An additional external reference to consider is the 2013 Compound Owner’s Manual from Precision Shooting Equipment (PSE), another major bow manufacturer. On page 4 it states, “Install the nocking point so that the arrow passes the center of the arrow rest mounting hole and runs parallel to the alignment mark on the window of the bow.” The use of the word “install” clearly indicates that it is something added to the bowstring, and not just a location.<sup>33</sup>

Thus, while Mr. Sturm was able to find some references on the Internet that support his position, it appears there is just as much extrinsic evidence that contradicts his construction. This is yet another reason to rely on the intrinsic evidence, which supports Bowtech’s construction that “nock point” refers to a component positioned on the bowstring and not simply a location on the bowstring.

Mr. Sturm is a patent attorney and an avid bow hunter. It appears that American is not presenting him as one with expertise in the design of bows. As a patent attorney, he references the Manual of Patent Examining Procedure, which American will presumably be relying on to support their position that “nock point” cannot be “a component positioned on the bowstring” as contended by Bowtech. This is because, according to Mr. Sturm, the figures in the patent would not be in compliance with MPEP 608.02(d), which provides:, “The drawing in a nonprovisional application must show every feature of the invention specified in the claims.” However, as noted above, the specification states: “The nock (44) is

---

<sup>33</sup> See Exh. C (Rebuttal Expert Report of Jason Fogg) at 3.

coupled to a nock point (46) provided in the bowstring (32).” 2:43-44. Figures 1 and 3 have a lead line from numeral 46 to the nock point. We are simply not able to tell from the Figures whether the lead line is a position on the bowstring or a component on the string. Regardless of which it is, the lead line shows where it is positioned, in compliance with the MPEP provision.

#### **IV. CONCLUSION**

The claims of the ‘001 Patent provide coverage that is limited to what is recited, and American should not be permitted to expand that language beyond the coverage that was granted by the PTO. Bowtech respectfully asks that this Court construe the claim terms as they are straightforwardly set out in the claim language and supported in the specification.

Dated this 17th day of May, 2013.

SCHWABE, WILLIAMSON & WYATT, P.C.

By: /s/Peter E. Heuser

Peter E. Heuser, *pro hac vice*

Kimvi T. To, *pro hac vice*

SCHWABE, WILLIAMSON & WYATT, PC

1211 SW 5<sup>th</sup> Avenue, Suite 1600

Portland, Oregon 97204

Telephone: 503-222-9981

Facsimile: 503-796-2900

[pheuser@schwabe.com](mailto:pheuser@schwabe.com)

[kto@schwabe.com](mailto:kto@schwabe.com)

Martha Shaff

Betty, Neuman & McMahon PLC

111 East Third Street, Suite 600

Davenport, IA 52801

Telephone: 563-326-4491

Facsimile: 563-326-4498

[mls@bettylawfirm.com](mailto:mls@bettylawfirm.com)

Attorneys for Defendants

**CERTIFICATE OF SERVICE**

I hereby certify that on May 17, 2013 I served this document to the following via the court's CM/ECF system:

J. Campbell Helton  
Matthew D. Giles  
WHITFIELD & EDDY, PLC  
317 Sixth Avenue, Suite 1200  
Des Moines, Iowa 50309-4195  
[helton@whitfieldlaw.com](mailto:helton@whitfieldlaw.com);  
[giles@whitfieldlaw.com](mailto:giles@whitfieldlaw.com)

Brett J. Trout  
Law Offices of Brett J. Trout  
516 Walnut Street  
Des Moines, Iowa 50309  
[trout@bretttrout.com](mailto:trout@bretttrout.com)

Attorneys for Plaintiffs

By: /s/Peter E. Heuser  
Peter E. Heuser